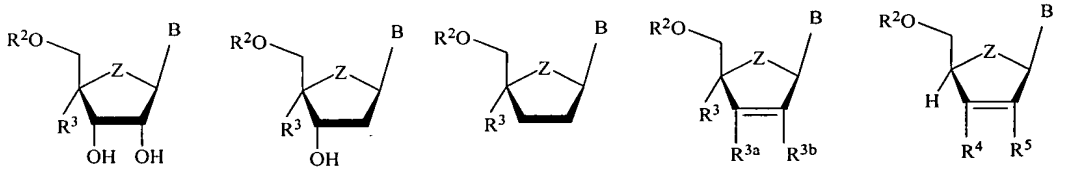
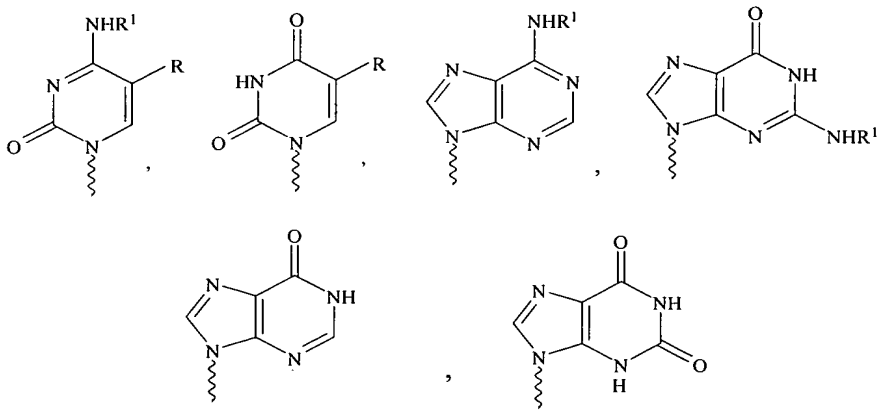
ABSTRACT

The present invention relates to novel compounds according to the to the general formulas I, II, III, IV or V:

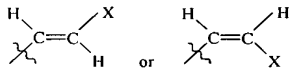


I **II** **III** **IV** **V**

wherein B is nucleoside base according to the structure:



R is H, F, Cl, Br, I, C_1-C_4 alkyl (preferably CH_3), -C≡N, -C≡C-R_a ,



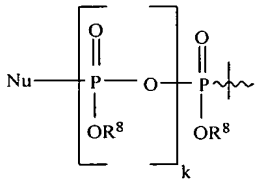
;

X is H, C_1-C_4 alkyl (preferably, CH_3), F, Cl, Br or I;

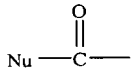
Z is O or CH_2, with the proviso that Z is CH_2 and not O when the compound is according to general formula II, R^3 is –C≡C-H and R^2 is H or a phosphate, diphosphate, triphosphate or phosphotriester group;

R^1 is H, an acyl group, a C_1—C_{20} alkyl or an ether group;

R^2 is H, an acyl group, a C_1—C_{20} alkyl or ether group, a phosphate, diphosphate, triphosphate, phosphodiester group or a



or



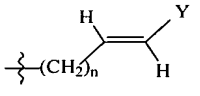
group;

Nu is a radical of a biologically active antiviral compound such that an amino group or hydroxyl group from said biologically active antiviral compound forms a phosphate, phosphoramidate, carbonate or urethane group with the adjacent moiety;

R^8 is H, or a C_1-C_{20} alkyl or ether group, preferably a C_1-C_{12} alkyl group;

k is 0-12, preferably, 0-2;

R^3 is selected from a C_1-C_4 alkyl (preferably, CH_3), $-(CH_2)_n$-C≡C-R_a,



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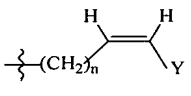
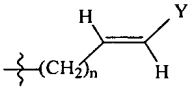


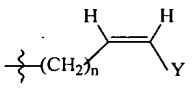
;

R^{3a} and R^{3b} are independently selected from H, F, Cl, Br or I ;

R^4 and R^5 are independently selected from H, F, Cl, Br, I, OH, C_1-C_4 alkyl (preferably, CH_3), $-(CH_2)_n$-C≡C-R_a,



or



with the proviso that R^4 and R^5 are not both H;

R_a is H, F, Cl, Br, I, or -C_1-C_4 alkyl, preferably H or CH_3;

Y is H, F, Cl, Br, I or -C_1-C_4 alkyl, preferably H or CH_3; and

n is 0, 1, 2,3, 4 or 5, preferably 0, 1 or 2;

and their anomers, pharmaceutically acceptable salts, solvates, or polymorphs thereof.